

REMARKS

Applicants respectfully request reconsideration of this Patent Application, particularly in view of the above Amendment and the following remarks. A check for \$50.00 is enclosed for this Amendment as the number of independent claims has not changed, and the total number of claims is twenty-one.

Amendment to the Claims

Applicants amended Claims 1, 13, and 20 to recite the coated activated carbon particles have a Relative Adsorption Efficiency with respect to at least one odoriferous agent of at least 70%, the odoriferous agent being selected from a group comprising ammonia, triethylamine, trimethylamine, dimethyldisulphide, and isovaleric acid. New dependent Claim 23 recites a Relative Adsorption Efficiency with respect to at least one odoriferous agent of at least 90%. Support for this Amendment can be found at, for example, page 1, last paragraph (and continuing onto page 2), and page 16, third paragraph, of Applicants' Specification. No new matter has been added to the claims by this Amendment.

Claim Rejections - 35 U.S.C. §103

Hiltzik et al.

The rejection of Claims 1-4, 6, 8-11, 13, 17, 18, 20, and 21 under 35 U.S.C. §103(a) as being unpatentable over Hiltzik et al., U.S. Patent Application Publication 2003/0082382, is respectfully traversed.

Applicants amended independent Claims 1, 13, and 20 to recite coated activated carbon particles have a silicone compound coating material add-on level of at least about 5% and a Relative Adsorption Efficiency with respect to at least one

odoriferous agent of at least 70%. The odoriferous agent is one or more of the group including ammonia, triethylamine, trimethylamine, dimethyldisulphide, and isovaleric acid. The Hiltzik et al. Publication does not teach or suggest a silicone coating at an add-on level of at least about 5% that has the Relative Adsorption Efficiency of Applicants' claimed invention.

The Hiltzik et al. Publication teaches that coating materials other than polyethylene, such as the siloxane material in Table V, would:

have to be used at less than a coating of 3% due to their great packing disruption and certain loss of BWC, GWC and ORVR capacity. (emphasis added).

Paragraph 60 continues to say that an amount lower than 3% of the other disclosed coating materials "may not" cause a reduction in the ORVR capacity.

The Hiltzik et al. Publication as a whole clearly teaches and suggests coating material amounts of less than 3% for coating materials other than polyethylene. The Hiltzik et al. Publication does not teach or suggest to one skilled in the art that a silicone compound coating add-on level of 5% or more can, or is expected to, provide a Relative Adsorption Efficiency as high as 70%. Applicants' claimed invention thus provides the *unexpected result* of a higher coating level without a "certain loss" of adsorption.

There is simply no teaching or suggestion, and no reasonable expectation of success, provided by the Hiltzik et al. Publication how to apply a silicone material-based coating to activated carbon in an amount greater than 5% while retaining a Relative Adsorption Efficiency as high as 70%, as in Applicants' claimed invention.

Therefore, Applicants' claimed invention, which recites an activated carbon coating material that includes a silicone compound having an add-on level of

at least about 5% and provides a Relative Adsorption Efficiency with respect to at least one odoriferous agent of at least 70%, the odoriferous agent being selected from the group comprising ammonia, triethylamine, trimethylamine, dimethyldisulphide, and isovaleric acid, would not have been obvious to one skilled in the art in view of the Hiltzik et al. Publication.

Claims 2-4, 6, 8-11, 17, 18, and 21 depend from one of Claims 1, 13, and 20, and are thus patentable for at least the same reasons as Claims 1, 13, and 20.

Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) as being unpatentable over the Hiltzik et al. Publication.

Hiltzik et al. in view of Karapasha

The rejection of Claims 1-4, 6, 8-11, 13, 17, 18, 20, and 21 under 35 U.S.C. §103(a) as being unpatentable over Hiltzik et al., U.S. Patent Application Publication 2003/0082382, in view of Karapasha, WO 91/12030, is respectfully traversed.

The Karapasha Publication is cited for teaching particular types of mineral particles. The above comments regarding the Hiltzik et al. Publication are also applicable here and are incorporated by reference. The combination of the Karapasha Publication does not rectify the deficiencies of the Hiltzik et al. Publication discussed above. The Karapasha Publication also does not teach or suggest a silicone material-based coating for activated carbon, especially in an amount greater than 5% while retaining a Relative Adsorption Efficiency as high as 70%, as in Applicants' claimed invention.

For at least the above reasons, Applicants request reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) as being unpatentable over the Hiltzik et al. Publication in view of the Karapasha Publication.

Karapasha in view of Hiltzik et al.

The rejection of Claims 1-4, 6-11, 13, 17, 18, 20, and 21 under 35 U.S.C. §103(a) as being unpatentable over Karapasha, WO 91/12030, in view of Hiltzik et al., U.S. Patent Application Publication 2003/0082382, is respectfully traversed.

The Hiltzik et al. Publication is combined with the Karapasha Publication in the Office Action because the Karapasha Publication does not disclose a silicone binder. However, as discussed above, the Hiltzik et al. Publication does not teach or suggest to one skilled in the art that a silicone compound-based coating add-on level of 5% or more can or would have been expected to provide a Relative Adsorption Efficiency as high as 70%. Actually, the Hiltzik et al. Publication teaches away from a higher add-on level, by teaching that amounts higher than 3% are not desirable due to certain loss of the carbon's properties. The combination of the Hiltzik et al. Publication and the Karapasha Publication does not provide or suggest applying a silicone material-based coating to activated carbon in an amount greater than 5% while retaining a Relative Adsorption Efficiency as high as 70%, as in Applicants' claimed invention.

For at least the above reasons, Applicants request reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) as being unpatentable over the Karapasha Publication in view of the Hiltzik et al. Publication.

Claim 7

The rejection of Claim 7 under 35 U.S.C. §103(a) as being unpatentable over Hiltzik et al., U.S. Patent Application Publication 2003/0082382, or Karapasha, WO 91/12030, in view of Hiltzik et al., and further in view of Cavezzan et al., U.S. Patent 4,954,539, is respectfully traversed. Claim 7 depends from Claim 1, and is thus patentable for at least the same reasons as discussed above for Claim 1.

Claim 22

The rejection of Claim 22 under 35 U.S.C. §103(a) as being unpatentable over Hiltzik et al., U.S. Patent Application Publication 2003/0082382, Hiltzik et al. in view of Karapasha, WO 91/12030, or Karapasha in view of Hiltzik et al., further in view of Hogenson, U.S. Patent 4,643,783, is respectfully traversed. Claim 22 depends from Claim 13, and is thus patentable for at least the same reasons as discussed above for Claim 13.

Conclusion


Applicants intend to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicants have not resolved in this response, Applicants' undersigned attorney requests a telephone interview with the Examiner.

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Applicants sincerely believe that this Patent Application is now in condition for allowance and, thus, respectfully request early allowance.

Respectfully submitted,



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